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COSTS AND BENEFITS OF PROTECTION
A STUDY BY THE ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT*

Summary

Concern about mounting pressures on the open multilateral trading system led the 1982 ministerial meeting of the Organization for Economic Cooperation and Development's (OECD) Council to ask the group's secretary general to carry out a study on the costs and benefits of trade and trade-related measures. The major results of this study are summarized in the following article. With demands for restrictions on imports proliferating in the United States, these findings deserve particularly careful review by legislators and policymakers.

Introduction

Over the last thirty years or more, the international exchange of goods and services has been a dynamic source of economic growth and structural flexibility. Throughout this period, the open multilateral system of trade and finance has adapted well to significant shifts in global patterns of competitiveness and the emergence of important new actors on the international scene. However, with the advent of prolonged slow growth in the late 1970s, the pressures for protection increased, in particular for so-called grey-zone measures. Despite the recovery, these pressures still persist in most of the OECD area, fueled by continued high unemployment, insufficient competitiveness of specific sectors and, in some countries, by currency appreciation.

*Reprinted from the OECD Observer, May 1985.

These problems, which have domestic and international origins, cannot be remedied by protective trade actions. Protectionist measures yield few benefits and impose substantial costs, chiefly on the protecting country but also on its trading partners. Not only have trade-restrictive measures proven to be an inefficient means of sustaining employment, they usually also delay much needed structural adjustment, making it more difficult to maintain non-inflationary growth and to create new viable jobs. Uncertainty about the future of trade regimes depresses business confidence. By implication, it has adverse effects on the efficiency of markets and the readiness of enterprises to expand and innovate, thereby affecting areas far beyond the initial government intervention. Trade protection has complex and pervasive effects throughout the economy. Consequently, the outcome of such policies frequently differs from the original intentions and objectives.

How Trade Barriers Have Spread

The OECD countries' commitment to the open multilateral system has ensured that by far the largest portion of manufactured trade encounters lower tariff obstacles today than at any time in the past. Subsequent to full implementation of the reductions agreed to in the Tokyo Round, average most-favored nation tariffs on industrial imports for the 17 major countries will be at around 4.5 percent. The results of the Tokyo Round also embody moves towards liberalization of some major non-tariff barriers. However, a relatively small, but recently increasing, number of sectors -- accounting for more than a quarter of manufactured trade -- are still subject to high nominal and effective tariffs (see chart), to severe non-tariff barriers and to distorting subsidization. Though the sectors traditionally most affected by such measures include textiles, clothing, footwear, steel and shipbuilding, protection has more recently been extended to previously less affected or unaffected sectors such as automobiles, consumer electronics and machine tools.

The lack of transparency of many of the trade barriers recently put in place makes it difficult to assess their extent or coverage, and any such assessment must be treated cautiously. On one plausible estimate, the share of restricted products in total manufactured imports increased over the period 1980 to 1983 from 6 percent to 13 percent for the United States and from 11 to 15 percent for the EEC [European Economic Community]. In 1983, the product groups subject to restriction accounted for around 30 percent of total consumption of manufactured goods in the countries covered, up from 20 percent in 1980. These results are drawn from a report which adopts a relatively narrow definition of non-tariff barriers; the increases in non-tariff protection are even more dramatic in some of the other research reviewed.

Within the protected sectors, the scope of protection has both deepened and widened. Taking steel, automobiles, motorcycles, consumer electronic products, textiles and footwear together, it has been estimated that the absolute number of non-tariff barriers quadrupled between 1968 and 1983. While less than one percent of OECD automobile trade (excluding trade within the EEC) was affected by discriminatory restrictions in 1973, this share had risen to nearly 50 percent a decade later. Other estimates suggest that the proportion

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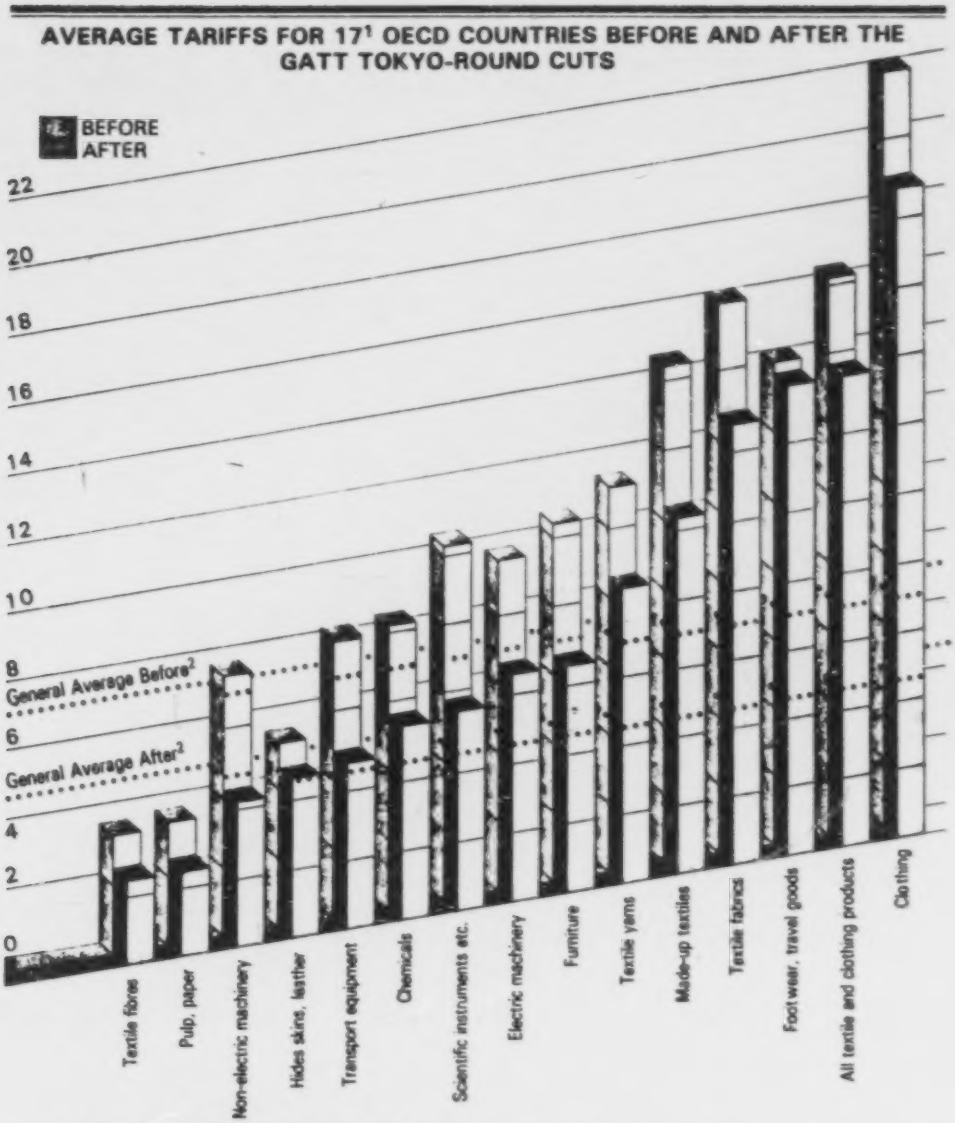

1. US, EEC9, Canada, Japan, Austria, Switzerland, Finland, Norway, Sweden.
2. All industrial products except petroleum.
Note: Tariff averages are weighted according to total imports of the 17 countries.
Source: GATT and OECD estimates.

of trade under non-liberal treatment rose in recent years from 31 to 73 percent in steel and from 53 to 61 percent in the textiles and clothing group.

Changes in the mix of policy instruments used to control imports have increased the extent of discrimination. There has been a marked shift away from GATT [General Agreement on Tariffs and Trade] Article XIX safeguards, applied on a non-discriminatory basis, towards bilateral instruments such as voluntary exports restraints (VERs) and orderly markets arrangements (OMAs). From 1980 to 1983, the share of Japan's and the Asian NICs' [newly industrializing countries] exports affected by discriminatory restrictions rose from 15 percent to over 30 percent (see Table 1). At the same time, the range of supplying countries subject to such restrictions has also expanded. Moreover, measures adopted to prevent transshipment very often impose heavy documentation requirements and, subsequently, additional costs on products from unrestricted sources. As a result, the spread of discrimination can undermine the free flow of goods, even between those countries which -- at least in theory -- are not subject to restrictions.

Table 1: Value of Manufactured Exports to OECD Countries Subject to Trade Restrictions

(in billions of dollars)

Country of Origin	Total Manufactured Exports 1980	Subject to Restrictions[1] In 1980	Subject to Restrictions[1] In 1983
Japan	$61.7	$ 7.0	$21.8
Korea	10.1	2.3	3.2
Taiwan	12.0	2.0	2.2
Hong Kong	11.8	3.4	4.2
Singapore	3.6	0.2	0.3
Total	99.2	14.9 (= 15%)	31.7 (= 32%)[2]

[1]Product items subject to restrictions are:

- Japan - 1980: steel; television receivers to U.S.; ships.
  1983: steel; one-third of television receivers to EEC; ships; automobiles; motorcycles to U.S.
- Korea - 1980: one-half clothing and textiles; one-third footwear; television receivers to U.S.
  1983: two-thirds clothing and textiles; one-half of footwear to EEC; one-half steel.
- Taiwan - 1980: same as for Korea.
  1983: same as for Korea.
- Hong Kong - 1980: two-thirds clothing and textiles.
  1983: four-fifths clothing and textiles.
- Singapore - 1980: one-third clothing and textiles.
  1983: two-thirds clothing and textiles.

[2]To correct for the impact of restrictions on the composition of trade, this figure has been calculated using 1980 weights.

Protectionist Measures Distort Trade Flows

It is frequently argued that the protectionist backlash has had a limited impact since trade in manufactures, even in the product groups most subject to restrictions, continued to grow rapidly in the 1970s. Equally, the countries to whose exports most of the discriminatory measures apply, managed to increase their share of OECD imports. However, the trade performance of the more restricted product categories deteriorated markedly in the 1980s. It would seem that -- after being largely ineffective in the 1970s (with the possible exception of the Multi-Fiber Agreement (MFA) -- protectionist measures were gradually reinforced and eventually began to bite.

In the 1970s, the impact of discriminatory restrictions on trade flows was limited by pervasive trade diversion, as imports from the more restricted sources were replaced by imports from other suppliers. Trade diversion has been greatest in industries where there is a multiplicity of potential sources of supply and where trade is highly responsive to price and quantity signals -- clothing and footwear, for instance. However, growing diffusion of technological and industrial capabilities, improvements in worldwide marketing and distribution channels and the great sensitivity of multinational enterprises to opportunities for shifting the site of production have also generated trade diversion in less mobile activities such as steel and consumer electronics. The 1977 Orderly Market Agreement for color television receivers between the United States and Japan is a good illustration. Though, at the time of the agreement, Japan accounted for 90 percent of U.S. imports of complete receivers, its share two years later was down to 50 percent, while that of the Asian NICs had increased from 15 to 50 percent.

In addition to changing the geographical origin of imports, quantitative restrictions have affected the nature of the products traded. In particular, faced with a volume limit on their exports, the more restricted suppliers have been encouraged to move up-market within the controlled group, thus maximizing the value of a fixed total volume of exports. According to one estimate, the share of luxury cars in Japanese automobile exports to the United States increased by 13 percentage points as a result of voluntary export restraint. There is also considerable evidence of such shifts in product composition occurring in the other industries reviewed.

All these protection-induced changes in the country and product composition of trade have tended to undermine the objectives of import control. Governments have therefore come under continuous pressure from domestic producers to extend the number of countries subject to the restrictions and to specify more precisely the product categories in which the restricted producers can operate. Thus, during the first Multi-Fiber Agreement (1974-77), the United States had bilateral agreements with 19 countries, but none of these agreements specified explicit limits on imports of so-called "sensitive items." During the second agreement (1978-81), specific limits on these items were introduced into U.S. bilateral agreements with seven countries; and during the third agreement (1982-86), this number rose to 14. Equally, for the EEC, the number of countries covered by bilateral agreements increased from 33 in MFA I to 43 in MFA III, while the number of categories specified went from 23 to 48, much of the rise actually occurring in MFA II.

Trade Restrictions Drive Prices Up

Discriminatory quantitative restrictions have created upward pressure on prices in protected markets: first, because the most restricted sources tend to be those with the lowest costs; and second, because these restricted sources raise their export prices to increase profits by capturing the economic rents from the restrictions. Particularly in industries where demand is -- at least in the short term -- fairly inelastic, these increases in import prices provide an important "price umbrella" for domestic producers. As restrictions have tightened and the scope for offsetting effects diminished, the upward pressure on prices may have strengthened.

A study of the United Kingdom clothing industry suggests that the average increase in U.K. clothing retail prices due to the second MFA was on the order of 20 percent and for lower quality items such as jeans 30 to 50 percent. Prices for children's wear -- a highly labor-intensive product -- doubled. These changes can have a regressive impact on income distribution, because clothing accounts for a larger share of poorer households' consumption expenditure. One estimate finds that protecting the Canadian clothing industry costs lower-income households four times as much as it costs higher-income households.

A recent report by the U.S. International Trade Commission illustrates the impact of voluntary export restraint on U.S. car prices. It estimates that in 1984 Japanese cars were sold in the United States for $1,300 more, on average, than they would have in the absence of the VER. The respective increases for 1981, 1982 and 1983 were on the order of $185, $359 and $831 per car. Thus, in a period of buoyant demand, U.S. consumers paid increasingly higher prices as a result of the shortfall in supply. During the same period, increases in the prices of domestically produced cars ranged from approximately $78 in 1981 to almost $660 in 1984, much of this increase apparently due to the VERs. Furthermore, the reduced availability and the prevailing higher prices of new Japanese cars led increasing numbers of consumers to turn to the used car market and thereby put upward pressure on the prices of used domestic and Japanese cars.

Protection, notably by voluntary export restraint, also provides large transfers to foreign producers. It is estimated that protection has increased the profit margin on Japanese steel sales to the U.S. market by at least 10 percent. This is around $200 million a year -- about equivalent to half of Japan's annual expenditure (the world's highest) on steel R and D. As regards textiles and clothing, the United Kingdom's restrictions under the MFA are estimated to transfer twice as much income to foreign exporters as to U.K. producers. A plausible overall assessment is that the annual transfer from OECD consumers to Asian NIC exporters of textile and clothing products is at least $2 billion. This is equivalent to around 4 percent of the total value of NIC exports to the OECD region.

Import Restrictions: An Inefficient Means of Sustaining Employment

With prolonged slow growth and high unemployment in the late 1970s, governments have come under increasing pressure to attenuate the speed of structural adjustment and the rate of job losses. However, import restrictions

appear to have only a limited positive impact on employment in the protected sectors. First, even in the sectors most exposed to international competition, trade flows are usually a fairly minor determinant of employment levels; second, because of trade diversion, discriminatory restrictions have a relatively limited impact on overall import volumes; third, the scope for substituting domestic output for imports may be limited. Thus, the proportion of domestic employment potentially protected by import restrictions is normally very small compared to the changes induced by shifting macroeconomic circumstances. On one estimate, the U.S.-Japan automobile VER increased U.S. employment by no more than 22,000 over the period April 1981 to end 1982, while the recession was cutting labor input in the auto industry by more than ten times this figure.

Protection is most likely to be effective in maintaining employment in the few industries which have structurally low productivity, little scope for modernization and hence compete mainly with developing countries: for example the clothing industry. It was estimated in 1980 that Canadian restrictions on apparel imports protected 7.5 percent of the industry's jobs. Another study found that 1977 U.S. tariffs on apparel preserved nearly 90,000 jobs, equivalent to 10 percent of the industry's employment. Finally, a 50 percent increase in allowable MFA imports of apparel under Swedish VERs would, it was concluded, reduce clothing employment by 6 percent, twice as large a job loss as a similar increase in textile imports would entail. In most other industries, the employment effect due to protectionist measures is typically on the order of two or three percentage points, though in the very short term the impact may be larger.

Over a longer period, protection can accelerate the substitution of capital for labor and thereby reduce industrial employment. This capital deepening, together with relatively slow demand growth, accounts for two-thirds or more of the long-run decline in employment in the textile industry in advanced OECD countries, with changes in import penetration being a rather minor factor. A recent U.K. study estimates that, given the slow growth of demand, productivity growth in that country's textile industry will reduce employment by nearly 40 percent over the period 1983-97. Abolishing the MFA would, over the same period, involve a fall in employment of only 7 percent, equivalent to 13,000 jobs. "Saving" each of these jobs costs U.K. consumers about twice as much annually as the yearly wage of a textile worker.

Productivity was also increasing (partly as a result of accelerated offshore assembly) when employment in the U.S. color television industry declined -- despite protection -- from 29,000 in 1977 to 26,000 in 1979 and 21,000 in 1981. It is estimated, however, that job losses between 1979 and 1981 would have been 1,000 to 1,500 greater, had import restrictions not been in effect. On the conservative assumption that the price of a $200 set increased by only $5, saving each of these jobs cost U.S. consumers over $60,000 a year.

Finally, job maintenance in the protected industry may be offset by adverse macroeconomic effects. Protection-induced changes in price and wage behavior can compromise the effectiveness of macroeconomic policy and necessitate a tighter stance for monetary and fiscal policies. Protection extensive enough to have a major impact on imports and employment in a wide

range of industries is likely to lead to currency appreciation which would, in turn, reduce total exports, thus curtailing employment in other sectors of the economy. Since the jobs being protected typically have lower skill requirements, they make fewer demands on a country's capacity to develop and diffuse new technologies and hence impede its ability to export. For Canada and Australia, econometric studies have found that persistent and widespread protection of manufacturing industry has imposed a "hidden tax" on the more export-oriented activities. The small number of lower-pay, lower-quality jobs saved by protection are replacing other jobs which, over the longer term, would contribute more to overall productivity and higher real incomes.

Protection Can Delay Much-Needed Adjustment

By raising prices and increasing the domestic producers' share in the home market, import restrictions can increase the resources available for industrial adjustment. The improved cash flow of the domestic firms affected makes it possible for them to invest in modernization of plant and equipment, to underwrite the costs involved in adjusting capacity to demand, to pay exit costs from no longer viable market segments, and/or to diversify into more promising areas of activity. Moreover, protection can encourage foreign producers to engage in joint ventures with domestic firms. But at the same time, protection normally reduces competitive pressures and, given the substantial costs adjustment entails, can perpetuate technical and economic inefficiency.

In fragmented, labor-intensive industries, such as clothing and footwear, there is limited scope for profit-enhancing product differentiation or substitution of capital for labor. As a result, protection does little to establish durable market segmentation or to reduce the cost differential between OECD producers and major developing country exporters. In the clothing industry, for example, advanced technology is being introduced into ancillary operations such as cutting and grading, but stitching operations, which account for 80 percent of value added, are -- and in the medium term will remain -- highly labor intensive. At this stage of production, cost differentials between developed countries and the leading developing country exporters are on the order of 5 or 6 to 1. But even under such circumstances, the argument that protectionist measures only facilitate a run-down in these activities is clearly contrary to the evidence. In effect, because entry barriers are low, whatever economic rents are created by protection simply attract new resources, not only labor and capital, but also entrepreneurship.

In oligopolistic industries, competition depends chiefly on product differentiation, economies of scale, technology, marketing and service. Under such conditions the scope for regaining competitive advantage may be greater. Indeed, several cases come to mind in which protection, coupled with adjustment programs, has encouraged firms to use the resources made available for restructuring. Prominent examples are the car industry in the United States and certain parts of the steel industry in the European Community. Frequently, however, factors are at work which impede adjustment. If price and quantity signals from the marketplace are distorted, import controls can make it difficult for firms to assess their long-term costs and set investment plans accordingly. If there is widespread excess capacity -- and modernization investments would involve construction of large-scale new plant as in the case,

for example, in the steel industry -- the risk of reinvesting in the activity may outweigh the potential benefits. Firms may also face political or institutional constraints on their restructuring choices if conditions are attached, e.g. if assistance is granted to firms, providing they maintain employment.

In the longer term, changing industry behavior in oligopolistic sectors can reduce the extent to which domestic producers benefit from protection-created rents and can narrow their adjustment options. If there is widespread excess capacity, and if major differences exist between firms' cost levels and strategic objectives, collusion on prices and output may be difficult to maintain, so that competition among existing domestic firms may erode profit margins. Furthermore, even in activities with substantial entry barriers, persistent rents from protection may encourage new entrants, including foreign companies in restricted countries which seek to appropriate a greater share of the rents by investing in the protected market. While new competition alters the industry's pricing behavior, the response of foreign rivals to protection also narrows product and marketing options. As competitors in restricted countries upgrade products and move up-market, the higher-cost domestic firms face increased foreign competition in those sections of the market which are least price-elastic. Yet this is precisely where their long-run competitive edge may otherwise lie.

Protection Hurts Developing Countries

On the whole, variations in economic growth rates in the industrialized countries have had more impact on export growth in the developing countries than OECD protection has had (see Table 2). However, the spread of trade

Table 2: Total OECD Imports from Five Major East Asian NICs, 1979-84

(in billions of dollars)

	1979	1980	1981	1982	1983	1984[1]
Singapore	$ 5.1	$ 7.0	$ 6.6	$ 6.6	$ 6.9	$ 8.6
Korea	10.8	11.1	12.5	12.7	14.6	18.1
Taiwan	11.9	13.8	15.2	15.6	18.4	23.7
Hong Kong	10.2	12.3	12.6	12.2	13.3	15.5
Malaysia	8.3	9.2	7.7	7.2	7.7	10.1
Total	46.2	53.4	54.6	54.2	60.8	76.0
of which imported by United States	17.6	20.4	23.0	24.1	29.7	39.8
	(average rate of change in real terms[2])					
Total	---	6.3%	2.2%	11.6%	17.5%	29.4%
United States	---	6.4	14.0	14.3	28.8	42.1

[1]For 1984, based on data for the first three quarters.
[2]Volume of imports: values deflated by the export price index of manufactures.

restrictions has changed the pattern and composition of these exports. Developing countries, and particularly the more advanced NICs, have rapidly stepped up the diversification of their exports, moving into new markets and more skill-intensive products. At the same time, there has been a deliberate shift of some production away from the countries most severely restrained by the protectionist policies of industrial countries into countries that are less restricted by also have low-cost labor. Protection has compounded the impact of changing cost configurations in prompting and accelerating these developments.

Hence some developing countries have captured market shares left by the more restricted exporting countries, benefiting in some cses from the shift of production facilities out of NICs. Attempts to circumvent quotas under Multi-Fiber Agreements and to benefit from the tariff preferences given developing countries by the Generalized System of Preferences have been important in this regard. Nonetheless, as restrictions tighten, second and third-generation manufacturing exporters seem more likely to run into difficulty than the more flexible NICs. Obstacles may include resistance from established exporters, anxious to preserve their market shares, and a network of trade restrictions which take effect quickly as exports expand fast from a low base.

Protecting countries have already shown their willingness to extend existing restrictions to new sources of supply, and this response may discourage investment in potential developing-country exporters. A striking instance is provided by the U.S. Orderly Marketing Agreement on color television receivers. Initially aimed at Japan, the agreement was extended to Korea and Taiwan when they emerged as alternative sources of supply. Though a number of other sources -- Mexico, Singapore and Thailand for instance -- were well placed to enter the United States market at that time, the deterrent effect of the initial extension of barriers was clearly sufficient to dissuade them.

Protection could also be relevant to the international debt problem (see Table 3). Debt-service ratios for developing countries fluctuated around 15-16 percent of exports during the 1970s and rose sharply to around 24 percent in 1982/83. But the recession, the dollar appreciation and the rise in interest rates which followed the second oil shock played a larger part in this increase than did OECD protection. Indeed, the rapid upsurge in developing country exports after 1982 has greatly contributed to avoiding any major debt crisis.

The importance of open multilateral trade with developing countries however goes far beyond the international debt issue. It has been estimated that a gradual increase in protection in the OECD region equivalent to a 15 percentage point rise in tariffs would cause a significant reduction of GDP [gross domestic product] in both developing and developed countries by 1995: the middle income oil-importing LDCs [less developed countries] would sustain a loss in GDP of about 3 1/2 percent, but the industrial countries would suffer a nearly equal loss as a result of the self-inflicted effects of their own protective measures.

Protection: A Blunt Instrument of Policy

Protectionist measures are usually intended to meet two broad objectives: to provide visible and immediate relief to industries experiencing

Table 3: OECD Imports from Major LDC Debtors Subject to Non-Tariff Barriers, 1982

(in billions of dollars)

	Brazil	Mexico	Argentina	Chile	Korea	Indonesia	Philippines	Yugoslavia	Total
Manufactured Imports Affected[1]	$1.8	$0.4	$0.2	$0.01	$6.8	$0.2	$0.6	$0.8	$10.8
Percent of Total OECD Manufactured Imports from That Country	42.9%	8.2%	22.2%	14.3%	58.1%	40.0%	30.0%	34.8%	40.6%
Agricultural Imports Affected[2]	$3.2	$1.4	$2.0	$0.6	$0.9	$0.6	$1.4	$0.3	$10.4
Percent of Total OECD Agricultural Imports from That Country	51.6%	73.7%	100.0%	95.0%	98.0%	54.5%	93.3%	68.2%	74.8%
Manufactured and Agricultural Imports Affected by Non-Tariff Barriers As Percent of Total OECD Imports from That Country	35.7%	8.0%	55.0%	21.0%	58.3%	4.3%	41.7%	31.4%	25.3%

[1]Textiles and clothing; iron and steel; footwear; consumer electronics.
[2]Meat; cereals; sugar; fish; vegetables and fruit; animal feeds; tobacco; vegetable oils.

severe difficulties, and notably to their workforce, while allowing ongoing adjustment to changed circumstances. These objectives correspond to a concern for employment and social equity on the one hand and to the goal of promoting greater economic efficiency and industrial restructuring on the other. Compared to the complexity of the objectives, protection is a fairly simple and blunt instrument of policy.

By reducing imports, protection seeks to raise the market share of domestic producers and the price they would receive for their goods in the absence of such measures. Raising output and profitability in the domestic industry is in turn presumed to increase employment and promote modernization. The indirect nature of this link between the instrument -- import controls -- and the policy variables targeted -- jobs and investment -- is the first reason for protection's ineffectiveness. There are others: trade diversion reduces the impact of discriminatory restrictions on the volume of imports; domestic producers may not be able to provide an attractive substitute for imports; if the pressure of either competition or excess capacity on the home market is strong enough, an increase in domestic output may involve little increase in employment, producers' profits or capacity to finance investment.

Even when protection does effectively transfer resources to the protected industry, the outcome may still fall far short of the policy goals. First, the two objectives of import controls -- modernization and job preservation -- are frequently incompatible, at least in the short run. More rapid modernization usually involves shutting obsolete plants and reducing the industry's labor force. Preserving jobs may mean keeping these plants, often the industry's most labor-intensive ones, in operation. Thus protection may help achieve one objective or the other; in none of the cases surveyed did it achieve both. Second, shifts in the regional and occupational composition of the protected industry make it difficult to ensure that whatever jobs are "saved" go to the workers who have the greatest difficulty in adjusting -- the less mobile, low-skilled workers in declining regions.

Ultimately, the ineffectiveness of protection has a pervasive impact on its costs. If protectionist measures fail to meet the underlying policy objectives, pressures may be created for yet more assistance to the industry in question. Furthermore, the "demonstration effect" of protection encourages more and more interest groups to become organized and divert adjustment policies from promoting overall economic efficiency to arbitrating among competing sectoral claims. Thus, to the direct cost of protection must be added those which are less tangible and more difficult to quantify. Even in economies operating at far from full employment, it may be possible to ignore the political and macroeconomic impact of a single protectionist measure but not the cumulative effect of the spread and persistence of such measures.

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